SRF CONSULTING GROUP, INC.
Transportation • Civil • Structural • Environmental • Planning • Traffic • Landscape Architecture • Parking • Right of Way

Project No. 045105

FINAL MEMORANDUM

TO: Mr. Brian Amundson, City of Eau Claire
Mr. Rick Shermo, Wis DOT District 6

FROM: Ken Holte, P.E., Principal
Jacqueline Corkle, AICP, Associate

DATE: May 10, 2005

SUBJECT: Birch Street Alternatives Evaluation

Background

The bridge at Birch Street over existing US Highway 53/Hastings Way in the City of Eau Claire is to be reconstructed due to its deteriorating physical condition. The City of Eau Claire and the Wisconsin Department of Transportation (Wis DOT) have agreed to work together to identify a geometric configuration that will facilitate the replacement of the existing structure as well as improve the overall traffic operations of the interchange.

On October 21, 2004, an open house was held at the Eau Claire senior center to present six concepts for improving the existing interchange at Birch Street and US Highway 53/Hastings Way. The intent of the open house was to collect comments from the public on the six alternatives to assist the agencies in narrowing the alternatives down to two concepts for further evaluation. The following memo describes the two alternatives that were moved forward based on the comments from the open house and input by Wis DOT and the City of Eau Claire.

Alternatives

The two base alternatives which garnered the most support during the initial screening process were:

Alternative 2D: Tight urban diamond interchange at Birch Street with a grade separation at Shale Ledge Road

Alternative 4A: Signalized at grade intersections at Birch Street and Seymour Road

These alternatives are described below. Figures illustrating the alternatives are found in Appendix A. Notes summarizing elements of each alternative are in Appendix B.

Alternative 2D: Tight urban diamond interchange at Birch Street with a grade separation at Shale Ledge Road

The three main features in Alternative 2D are a tight urban diamond interchange (TUDI) at Birch Street, an overpass at Shale Ledge Road, and a frontage road on the east side of Hastings Way between Birch Street and Seymour Road.

In addition to connecting Hastings Way and Birch Street, the TUDI alternative also has ramp connections that provide access from Hastings Way to Galloway Street, Hastings Place and the east frontage road. Descriptions of these connections are described below:

- Southbound Hastings Way traffic can exit onto Galloway Street via the SB off ramp and crossing Birch Street, while Galloway Street traffic can access southbound Hastings Way directly via a slip ramp. The slip ramp and SB off ramp connections to Galloway Street provides access to/from the downtown commercial center without having southbound Hastings Way traffic go through residential areas on Birch Street west of Hastings Way.

- Northbound traffic may exit via a NB off ramp directly to Hastings Place, which then connects to Galloway Street and to Birch Street. Galloway Street traffic can access NB Hastings Way by traveling north on Hastings Place to Pine Avenue and then from Pine Avenue to Birch Street and then onto the NB on ramp.

- Northbound Hastings Way traffic has access to the east frontage road is provided via a one-way (NB) traffic connection between the northbound Hastings Way ramp at Birch Street and the east frontage road.

At Seymour Road, the existing intersection will be replaced by button-hook ramps and a bridge overpass. The button-hook ramps provide access to and from Hastings Way. The button-hook ramps for southbound Hastings Way are located near the existing Seymour Road intersection. At this ramp intersection, Western Avenue is slightly realigned to provide better spacing with the off-ramp. In addition, Western Avenue is extended south of Seymour Road to an overpass at Shale Ledge Road. This overpass allows traffic west of Hastings Way access onto northbound Hastings Way and traffic east of Hastings Way access to southbound Hastings Way. The button-hook ramps for northbound Hastings Way are located north of the existing Seymour Road intersection. The button-hook ramp is tied to a newly aligned Trindal Street which connects to a realigned Ravencrest Avenue. The existing east frontage road intersection with Seymour Road is reconfigured to curve into existing Seymour Road. On the north side of Seymour Road, the frontage road connection is converted to a cul-de-sac.

Access to the fire station will be provided via the NB off ramp exactly as it currently exists.

Local traffic may continue to travel between Seymour Road and Birch Street on the east frontage road; however, southbound frontage road traffic no longer intersects Birch Street at

the northbound off-ramp intersection. Instead, southbound traffic is routed to the Mt. Nemo Avenue/Birch Street intersection via Mountain View Place.

Seymour Road-Option

A second option was developed for the Seymour Road intersection with Hastings Way. This Option or "flap" is an at-grade intersection which provides partial movement between Hastings Way and Seymour Road. Southbound traffic on Hastings Way can access Seymour Road on the west side of Hastings Way via a right turn lane and can access Seymour Road on the east side of Hastings Way via a left-turn lane. Seymour Road traffic west of Hastings Way can access southbound Hastings Way, however, no access is provided to northbound Hastings Way nor is access provided to Seymour Road east of Hastings Way. This Option also realigns Western Avenue slightly to the west to provide better spacing with the Seymour Road/Hastings Way intersection.

Northbound traffic on Hastings Way can access Seymour Road on the east side of Hastings Way via a right turn lane and can access Seymour Road on the west side of Hastings Way via a left-turn lane. Seymour Road traffic east of Hastings Way can access northbound Hastings Way, however, no access is provided to southbound Hastings Way nor is access provided to Seymour Road west of Hastings Way. This option also realigns Ravencrest Avenue slightly to the east to create a new intersection with Trindal Street and the frontage road cul-de-sac on the north side of Seymour Road is removed. The existing frontage road intersection on the north side of Seymour Road is closed. The existing frontage road connection to the south is realigned to the east to provide better spacing with the Seymour Road/Hastings Way intersection.

Alternative 4A: Signalized at grade intersections at Birch Street and Seymour Road

Alternative 4A includes an at-grade intersection at both Birch Street and Seymour Road. It also includes a slightly realigned frontage road on the east side of Hastings Way.

This alternative removes the existing diamond interchange at Birch Street and replaces it with an at-grade Hastings Way/Birch Street intersection. The intersection is signalized, stopping traffic on Hastings Way and Birch Street. All traffic movements are permitted at the intersection.

South of the Hastings Way/Birch Street intersection the following local road connections exist:

- Southbound Hastings Way traffic can exit onto Galloway Street via a slip ramp and Galloway Street traffic can access southbound Hastings Way through the slip ramp. The slip ramp essentially operates as a right-in/right-out access to Galloway Street. The slip ramp onto Galloway Street provides access to/from the downtown commercial center without having southbound Hastings Way traffic go through residential areas along Birch Street west of Hastings Way.

- Northbound Hastings Way traffic may exit via a NB off ramp directly to Hastings Place, which then connects to Galloway Street and to Birch Street. Galloway Street traffic can access NB Hastings Way by traveling north on Hastings Place to Pine Avenue and then from Pine Avenue to Birch Street.

On Birch Street east of Hastings Way, a new connection to the existing east frontage road would be created. This frontage road would continue to provide access to the residential neighborhood immediately east of Hastings Way. The frontage road would continue to accommodate two-way traffic between Birch Street and Seymour Road. The existing ramp onto northbound Hastings Way is eliminated.

Additional improvements include geometric changes to Birch Street between Pine Avenue and Starr Avenue. Most of the geometric changes were created to accommodate turn lanes and through traffic at the Birch Street/Hastings Way intersection.

Access to the fire station will be provided via northbound Hastings Way just south of the Hastings Way/Birch Street intersection.

At Seymour Road, Alternative 4A removes the existing, channelized at-grade intersection and replaces it with a conventional, signalized, at-grade intersection. All movements are permitted at the signalized intersection. Improvements to Seymour Road west of Hastings Way include an improved intersection with Western Avenue. Improvements to Seymour Road east of Hastings way include an improved intersection with the frontage road and an improved intersection with Ravencrest Avenue. All movements are provided at the improved intersections. In addition to these improvements, Trindal Street is realigned with Ravencrest Avenue to provide a full access intersection. The existing intersection on Seymour Road with the east frontage road north of Seymour Road is closed and access is provided via Trindal Street.

Seymour Road-Option

A second option for Seymour Road was developed to provide partial access to Hastings Way from Seymour Road. Please refer to Alternative 2D for the detailed description; the Seymour Road Option is the same for both Alternative 2D and Alternative 4A.

Alternative Comments

Previous memos distributed during the alternative development process have provided general statements on how one concept may be “better”, “worse” or “different” than other alternatives under consideration. Following the October 2004 open house, a decision was made to develop more specific information for the two remaining alternatives. The analysis for the remaining alternatives has been focused on the following:

- Pedestrian Movements
- Traffic Operations
- Costs
- Constructability/Staging

Pedestrian Movements

Alternative 2D provides a grade separated bridge on Birch Street for pedestrians to use in order to cross Hastings Way. Along Birch Street, sidewalks are provided so that pedestrians are separated from vehicular traffic. The ramp terminals at Birch Street include traffic signals which can be used to permit pedestrian crossings along Birch Street. At the Shale Ledge Road grade separated crossing there is a bridge which connects pedestrians/bicyclists on the east side of Hastings Way with the existing bicycle trail on the west side of Hastings Way. On the west side of Hastings Way there is a box culvert at the Birch Street/Hastings Way interchange to keep pedestrian/bicycle movements along the existing trail separated from vehicluar traffic. In general, the TUDI is more accommodating to pedestrians than the at-grade intersections that are described below for Alternative 4A.

Alternative 4A has sidewalks along Birch Street which separate pedestrians from vehicular traffic. At the Birch Street/Hastings Way intersection, a traffic signal will allow pedestrian movements. Because there is a median on Hastings Way at the intersection, a refuge can be established for pedestrians so that they would only have to cross one section of Hastings Way on a given pedestrian cycle. This shortens the distance that the pedestrian has to cross. At the Seymour Road intersection, sidewalks and a traffic signal allow pedestrians to cross similarly to how they would cross Birch Street.

The Option at Seymour Road for both Alternatives 2D and 4A includes sidewalks leading to the intersection of Seymour Road and Hastings Way. Once at the intersection, pedestrians will have to cross Hastings Way without the aid of a controlled traffic device. This option is the least “pedestrian friendly”.

Traffic Forecasting

Traffic forecast were developed for year 2028 to understand the demand for traffic to use Birch Street, Hastings Way and Seymour Road within the study area. The preferred method for developing traffic forecasts would be to use the Eau Claire Regional Model. However, the model is in the process of being updated and will not be completed until later this year. Using the old model, which was developed in 1992, is not appropriate as many inputs and assumptions in the older model have changed.

As a result of the model limitation, another method was needed to develop future traffic volumes within the study area. In coordination with Wis DOT staff at both the District and Central Offices, a growth rate method was chosen. Traffic counts from September, 2004, were placed into a gravity model to estimate origins and destinations (see figure in Appendix C). An annual growth rate of two percent was applied to all traffic. Two-thirds of Hastings Way traffic was removed to account for traffic diverting onto the new U.S. Highway 53 bypass. Appendix C shows the forecasted traffic volumes that were used in the comparison evaluation.

As the 1992 Regional Model and the current gravity model do not reflect the influence an upgraded Galloway Street will have on Birch Street traffic, we recommend that once the updated Eau Claire Regional Model is completed, traffic forecasts for this area be reevaluated, and a more detailed traffic study be completed. This will provide better information to define the geometric requirements of the selected alternative.

Traffic Operations

Traffic operations analyses were conducted on both Alternatives 2D and 4A for year 2028. The analysis was performed using Synchro – Sim Traffic software. The following highlights the traffic operations for alternative 2D:

- Intersections along Seymour Road and its connection to Hastings Way will operate under capacity.
- The intersection of Starr Avenue and Birch Street will operate near capacity.
- The intersection of Wagner Avenue and Birch Street overall will operate under capacity. Although vehicles entering the intersection from Wagner Avenue will experience high delay.
- The intersections of the east and west ramps with Birch Street will operate under capacity. However, vehicle queues occurring in the eastbound direction worsen operations along Birch Street, specifically at Wagner Avenue and Starr Avenue. The addition of an eastbound right turn-lane at Birch Street and the west ramp would reduce vehicle queues.
- The intersection of Pine Street and Birch Street will operate under capacity.

The following highlights the traffic operations for alternative 4A:

- The intersection of Western Avenue and Seymour Road will operate under capacity.
- The intersection of Hastings Way and Seymour Road will operate under capacity.
- The intersection of Starr Avenue and Birch Street will operate near capacity.
- The intersection of Wagner Avenue and Birch Street overall will operate under capacity. Although vehicles entering the intersection from Wagner Avenue will experience high delay.
- The intersection Hastings Way and Birch Street will operate under capacity.
- The intersection of Pine Street and Birch Street will operate under capacity.

Costs

Preliminary costs for the two alternatives were developed to get a relative cost comparison. Alternative 2D is the more expensive alternative. This alternative includes costs for the following:

- Lowering of Hastings Way at the Hastings Way/Birch Street interchange and at Shale Ledge Road to accommodate new bridges.
- Roadway realignments for facilities other than Hastings Way (short realignments for intersection connections).

- New bridge at Birch Street/Hastings Way.
- New bridge at Shale Ledge Road.
- Retaining walls associated with the lowering of Hastings Way.
- Two traffic signals.
- Right-of-way for Ravencrest Avenue realignment, Western Avenue improvements, and small strips along Birch Street and Seymour Road. Additionally, temporary easements will also be required. (Actual costs for right-of-way are not included in project totals discussed below.)

Additionally, Alternative 2D has potential cost savings associated with the bridge type used at Birch Street and grading revisions based upon the Option at Seymour Road. The cost estimates for these scenarios can be found in Appendix D.

Taking into account the factors identified above, except for right-of-way costs, preliminary construction cost estimates for Alternative 2D are approximately $14.7 million. If the Option at Seymour Road is selected, preliminary construction cost estimates are approximately $10.5 million. The Option at Seymour road will also incur similar right-of-way costs for the realignment of Ravencrest Avenue along with the acquisition of a parcel in the SE quadrant of Hastings Way and Seymour Road.

Alternative 4A is cheaper than Alternative 2D primarily due to the fact that it does not include two bridges, nor does it require as many retaining walls, nor as extensive grading. Costs for Alternative 4A include the following:

- Raising Hastings Way from Galloway Street to north of the Hastings Way/Birch Street intersection.
- Roadway realignments for facilities other than Hastings Way (short realignments for intersection connections).
- Retaining walls.
- Two traffic signals.
- Right-of-way along Birch Street, removal of a business on the north side of Birch Street, Ravencrest Avenue realignment and small strips along Seymour Road.

Taking into account the factors identified above, preliminary construction cost estimates for Alternative 4A are approximately $6.4 million. If the Option at Seymour Road is selected, preliminary cost estimates are approximately $6.1 million. The Option at Seymour road will incur similar right-of-way costs for the realignment of Ravencrest Avenue along with the acquisition of a parcel in the SE quadrant of Hastings Way and Seymour Road.

Constructability

Constructing an improvement with minimal impact to existing traffic flows and patterns is always desired. Both Alternatives 2D and 4A will require major changes in the grade/elevation of Hastings Way that will require some creative staging during construction in order to maintain most existing traffic flows. In addition to staging concerns, there are some constructability concerns with regard to water runoff and fill material.

Alternative 2D construction and staging issues include the following:

- Birch Street, at a minimum, will require traffic to be narrowed to one lane in each direction so that the bridge can be replaced. If traffic is allowed to stay on Birch Street during construction, additional structural support is needed for the existing bridge. All traffic movements (through and turning traffic) will be served from two lanes, which will cause delays over existing conditions. If additional structural support is not provided for the existing bridge, Birch Street will have to be closed. If Birch Street is closed, traffic could be provided access across Hastings Way via Galloway Street and/or at Seymour/Shale Ledge Roads.
- Hastings Way will be narrowed to one lane of traffic in each direction while the roadway is lowered. As part of this construction, temporary pavement and structural support (shoring) will be required.
- The profile cuts on Hastings Way reduce the flexibility of drainage options for runoff water before it goes into the river.
- The profile cuts on Hastings Way will produce large quantities of excess grading material/fill.

Alternative 4A construction and staging issues include the following:

- Hastings Way can be narrowed to one lane of traffic in each direction during construction. Little or no temporary pavement and structural support (shoring) will be required. If it is desired, two lanes of traffic in each direction could be maintained. This option requires temporary pavement and structural support (shoring).
- The existing Birch Street bridge can stay in place until work is partially completed on Hastings Way and Seymour Road. Once Seymour Road is completed, Birch Street will need to be closed for several weeks. Birch Street traffic can be rerouted to Galloway Street or to Seymour Road during this time.
- The expressway design allows for more opportunities for water storage before it goes into the river.
- The earthwork is near a balance, so there is limited material/fill left over.

February 24, 2005 Public Open House

A second public open house was held on February 24, 2005 to collect input on the two remaining alternatives described in previous sections of this memo. Approximately 20 people attended the open house. Comments submitted by residents and property owners are attached in Appendix E.
A number of the open house attendees were property owners near the Seymour Road intersection. As a result, most of the comments focused on the improvements for this area. General comments with regard to Seymour Road included the following:

- Preference for an at-grade intersection at Seymour Road
- Question the need to realign Ravencrest Avenue given slopes and soils (rock) in the area
- Would prefer to maintain the existing east frontage road north of Seymour Road

There were also comments with regard to bicycle accommodations from a local bicycle advocate.

Conclusions

The two remaining alternatives reflect differing expectations of the corridor. Alternative 2D (TUDI) represents a freeway condition conducive to higher travel speeds and volumes. Alternative 4A (at-grade) represents an arterial expressway more commonly used to deliver traffic to a freeway. The decision to choose one of these options over the other should be consistent with city's long-term vision for the Hastings Way corridor.

The analysis developed to date represents an effort to identify major issues between the potential alternatives. The selected alternative should be further refined based upon updated traffic modeling information, pubic input collected at the two open houses, and agency input in order to determine the final geometrics.

Appendix A
Alternative Figures

Appendix B
Alternative Notes

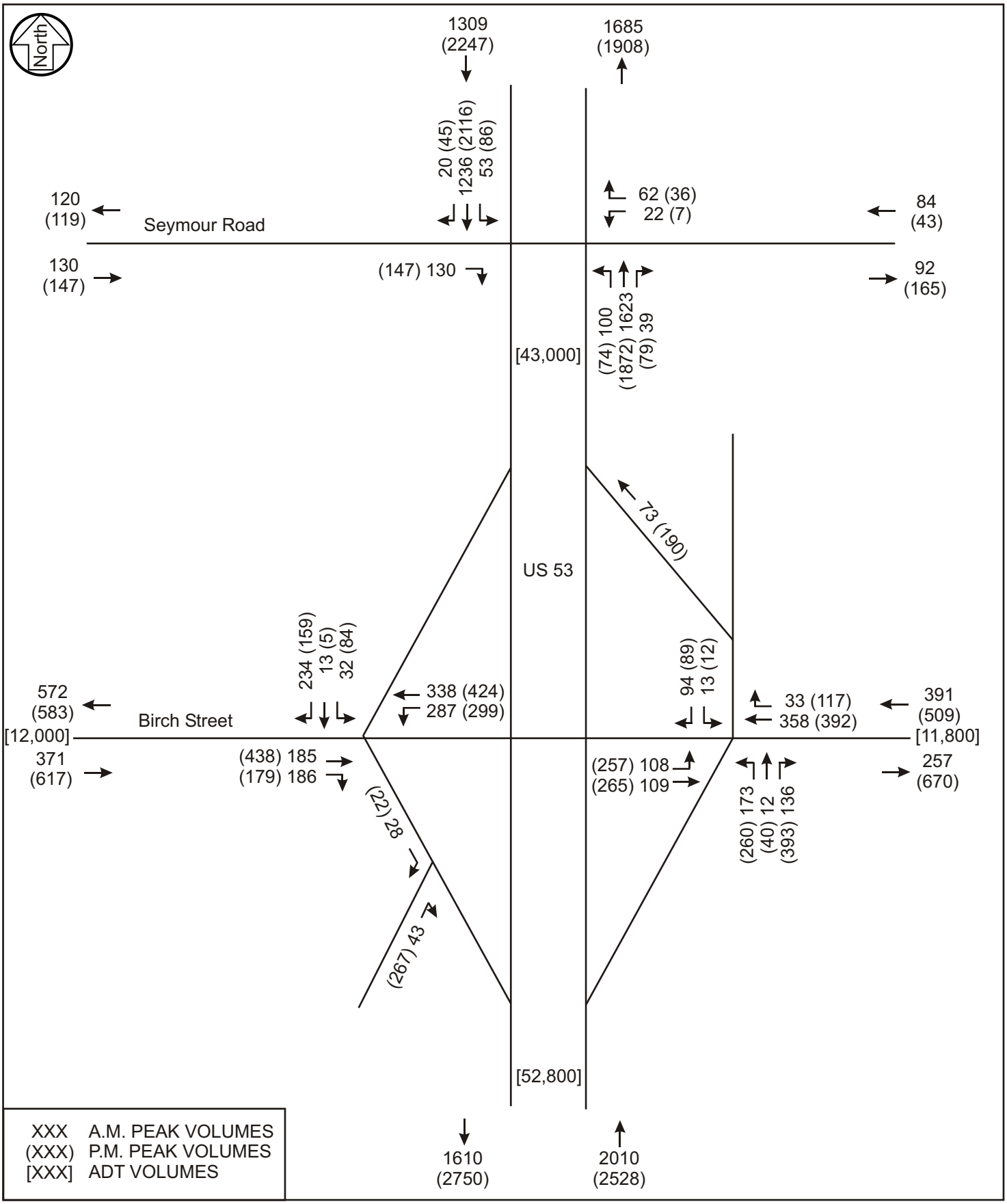
Alternative 2D Notes **(with Grade Separation at Shale Ledge Road)**

- Has more of a freeway feel.
- Eliminates existing slip ramp at east frontage road.
- Provides for all movements at Birch Street.
- Pedestrians are able to cross on bridges at Birch Street and Shale Ledge Road.
- Provides access to Galloway Street.
- Is a "safer" design - reduces conflict points.
- Fire station may remain and have same access as today.
- Does not require the relocation of any businesses.
- Has some circuity for movements at Seymour Road.
- Has additional costs; requires a bridge at both Birch Street and Shale Ledge Road and a number of retaining walls.
- Overall traffic operations are under capacity. Some movements (Wagner Avenue) will have delay.
- Local traffic continues to travel between Seymour Road and Birch Street on the east frontage road; however, southbound frontage road traffic no longer intersects Birch Street at the northbound off-ramp intersection. Instead, southbound traffic is routed to the Mt. Nemo Avenue/Birch Street intersection.
- Estimated costs range between $10.2 and $14.7 million.
- Construction staging and constructability issues are more complex than those for Alternative 4A.

Alternative 4A Notes (with Signalized Intersection at Seymour Road)

- Has more of a "local" road feel.
- Eliminates existing slip ramp at Somona Parkway.
- Provides for all movements at Birch Street and Seymour Road.
- Is easy for drivers to navigate.
- Fire station remains where it is today.
- Better pedestrian/bicycle crossing at Seymour than what exists today.
- Provides access to Galloway Street.
- Increased crash potential - at-grade intersections.
- Adds two traffic signals to Hastings Way.
- Has closely spaced frontage road at the Seymour intersection.
- Requires the relocation of a business (U-Haul).
- Phasing of the project requires new US 53 to be open to traffic prior to converting Birch Street to an at-grade intersection (existing traffic volumes on Hastings Way are too high for an at-grade intersection to function properly).
- Overall traffic operations are under capacity. Some movements (Wagner Avenue) will have delay.
- Driveway access at intersection locations are close.
- Estimated costs range between $6.1 and $6.4 million.
- Construction staging and constructability issues are less complex than those for Alternative 2D.

Appendix C
Forecast Volumes



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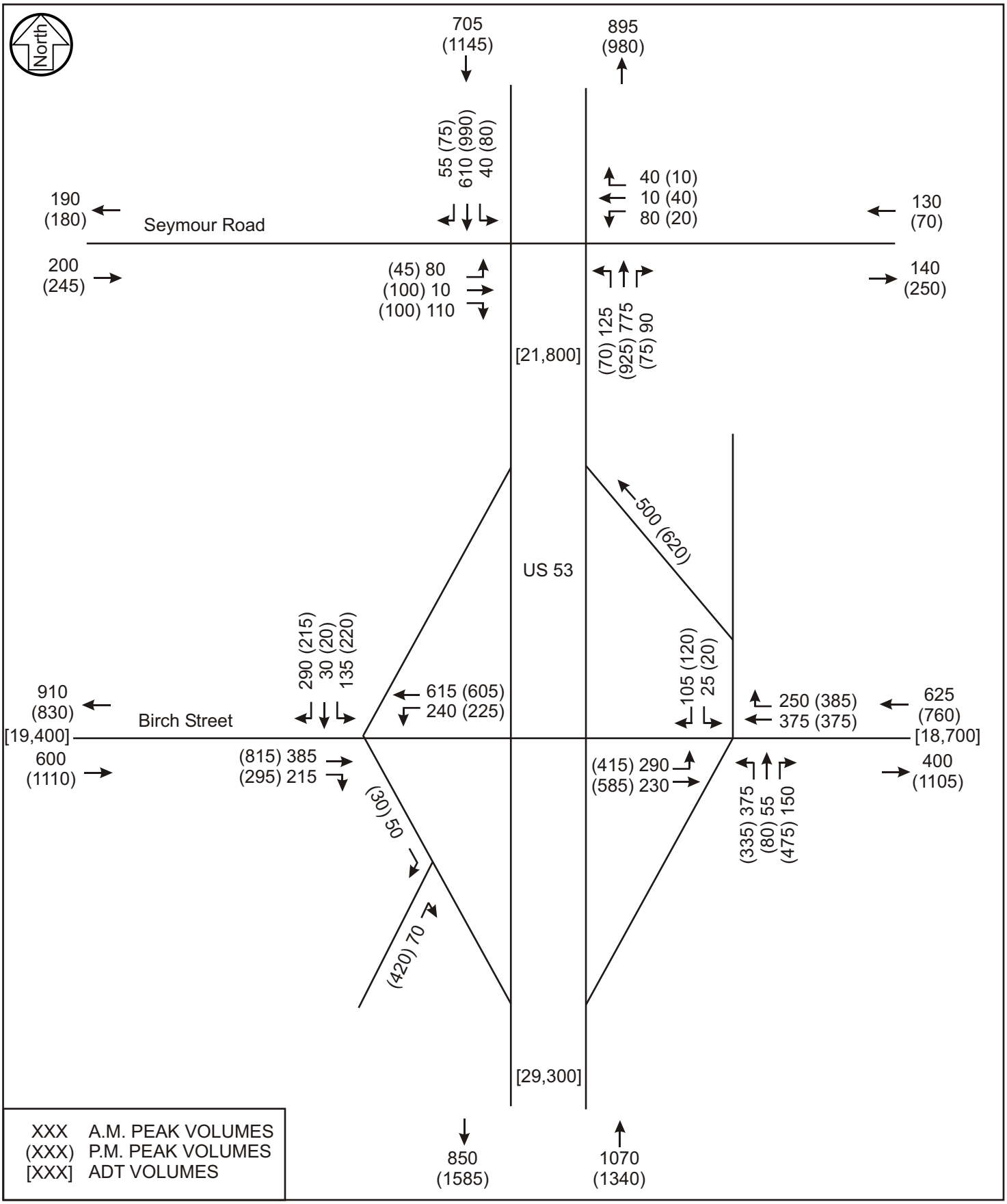
00045105
February 2005

EXISTING TRAFFIC VOLUMES

BIRCH STREET STUDY
City of Eau Claire, WI

Figure 1



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February 2005

YEAR 2028 TRAFFIC FORECASTS

BIRCH STREET STUDY
City of Eau Claire, WI

Figure 2

Appendix D
Preliminary Cost Estimates

Birch Street / Hastings Way Concept Alternatives - Eau Claire, WI
Concept Cost Estimates

Prepared By: SRF Consulting Group, Inc.
February 16, 2005

			Alternative 2D				Alternative 2D (single span) w/ at Grade Intersection at Seymour				Alternative 2D (2 span) w/ at Grade Intersection at Seymour				Alternative 4A				Seymour Road Flap			
			Tight Urban Diamond at Birch Street (single span) and Grade Separation at Shale Ledge				Tight Urban Diamond at Birch Street (single span) and At Grade Intersection at Seymour (Flap)				Tight Urban Diamond at Birch Street (double span) and At Grade Intersection at Seymour (Flap)				At Grade Intersections at Birch and Seymour				At Grade Intersections at Birch and Seymour			
			Birch Street Area		Shale Ledge / Seymour Area		Birch Street Area		Shale Ledge / Seymour Area		Birch Street Area		Shale Ledge / Seymour Area		Birch Street Area		Shale Ledge / Seymour Area		Birch Street Area		Shale Ledge / Seymour Area	
ITEM DESCRIPTION (NOTES)	**UNIT**	**UNIT PRICE**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
REMOVALS																						
Clearing	acre	$2,500.00																				
Grubbing	acre	$2,500.00																				
SUBTOTAL REMOVALS COSTS:																						
STORM SEWER & UTILITY																						
Storm Sewer Network(urban)	mile	$400,000.00	1.00	$400,000	0.75	$300,000	1.00	$400,000	0.75	$300,000	1.00	$400,000	0.75	$300,000	1.00	$400,000	0.75	$300,000	1.00	$400,000	0.75	$300,000
Ponds (Grading)	each	$50,000.00	2	$100,000	1	$50,000	2	$100,000	1	$50,000	2	$100,000	1	$50,000	2	$100,000	1	$50,000	2	$100,000	1	$50,000
SUBTOTAL STORM SEWER & UTILITY COSTS:				**$500,000**		**$350,000**		**$500,000**		**$350,000**		**$500,000**		**$350,000**		**$500,000**		**$350,000**		**$500,000**		**$350,000**
PAVING AND GRADING COSTS																						
Common Excavation (EV)	cu. yd.	$3.00	181,500	$544,500	129000	$387,000	60,000	$180,000	11,000	$33,000	45,000	$135,000	9,000	$27,000	21,500	$64,500	11000	$33,000	21,500	$64,500	11000	$33,000
Borrow (CV)	cu. yd.	$7.50													20,000	$150,000	15000	$112,500	20,000	$150,000	15000	$112,500
Aggregate Base (CV) (1)	cu. yd.	$15.00	14,000	$210,000	9,800	$147,000	14,000	$210,000	9,800	$147,000	14,000	$210,000	9,800	$147,000	12,664	$189,960	8590	$128,850	12,664	$189,960	8590	$128,850
Select Granular (CV) (1)	cu. yd.	$10.00	38,863	$388,630	27,322	$273,220	38,863	$388,630	27,322	$273,220	38,863	$388,630	27,322	$273,220	35,305	$353,050	23948	$239,480	35,305	$353,050	23948	$239,480
Mainline Pavement (Concrete) (2)	sq. yd.	$40.00	19,362	$774,480	19,949	$797,960	19,362	$774,480	19,949	$797,960	19,362	$774,480	19,949	$797,960	18,456	$738,240	13284	$531,360	18,456	$738,240	13284	$531,360
Mainline Shoulder Pavement (Con (3)	sq. yd.	$35.00	2,561	$89,635	133	$4,669	2,561	$89,635	133	$4,669	2,561	$89,635	133	$4,669	2,391	$83,685	2440	$85,400	2,391	$83,685	1500	$52,500
Ramp Pavement (Concrete) (3)	sq. yd.	$35.00	9,425	$329,875			9,425	$329,875			9,425	$329,875			4,045	$141,575			4,045	$141,575		
Local Street Pavement (Bituminou (4)	sq. yd.	$16.00	9,455	$151,280	17,776	$284,416	9,455	$151,280	17,776	$284,416	9,455	$151,280	17,776	$284,416	16,112	$257,792	10723	$171,568	16,112	$257,792	7304	$116,864
Driveway Pavement (Bituminous) (4)	sq. yd.	$14.00	294	$4,116	294	$4,116	294	$4,116	294	$4,116	294	$4,116	294	$4,116	2,899	$40,586	294	$4,116	2,899	$40,586	294	$4,116
Trail Pavement	sq. ft.	$1.50													8,000	$12,000	178	$267	8,000	$12,000	178	$267
Tack Coat	gal	$1.50	946	$1,419	1,777	$2,666	946	$1,419	1,777	$2,666	946	$1,419	1,777	$2,666	1,611	$2,417	1072	$1,608	1,611	$2,417	730	$1,095
Guardrail	lin. ft.	$12.00	400	$4,800			400	$4,800			400	$4,800										
Concrete Curb and Gutter	lin. ft.	$9.00	21,800	$196,200	15,295	$137,655	21,800	$196,200	15,295	$137,655	21,800	$196,200	15,295	$137,655	17,218	$154,962	10521	$94,689	17,218	$154,962	10554	$94,986
4" Concrete Walk	sq. ft.	$2.50	42,549	$106,373	54,204	$135,510	42,549	$106,373	54,204	$135,510	42,549	$106,373	54,204	$135,510	52,833	$132,083	26171	$65,428	52,833	$132,083	27045	$67,613
SUBTOTAL PAVING AND GRADING COSTS:				**$2,801,308**		**$2,174,212**		**$2,436,808**		**$1,820,212**		**$2,391,808**		**$1,814,212**		**$2,320,850**		**$1,468,266**		**$2,320,850**		**$1,382,631**
TRAFFIC SIGNAL AND LIGHTING COSTS																						
Signals (major)	each	$180,000.00													1	$180,000.00	1	$180,000	1	$180,000.00		
Signals (minor)	each	$150,000.00	2	$300,000			2	$300,000			2	$300,000										
Interchange Lighting (permanent, standard rur	each	$100,000.00	1	$100,000	1	$100,000	1	$100,000	1	$100,000	1	$100,000	1	$100,000								
SUBTOTAL LIGHTING COSTS:				**$400,000**		**$100,000**		**$400,000**		**$100,000**		**$400,000**		**$100,000**		**$180,000.00**		**$180,000**		**$180,000.00**		
STRUCTURAL COSTS																						
Bridge Structure	sq. ft.	$90.00	10,900	$981,000	6250	$562,500	10,900	$981,000			12,500	$1,125,000										
Bridge Approach Panels	sq. yd.	$80.00	262	$20,960	154	$12,320	262	$20,960			262	$20,960										
Pedestrian Underpass Box Culvert	lin. ft.	$700.00	125	$87,500			125	$87,500			125	$87,500			125	$87,500			125	$87,500		
Pedestrian Underpass Box Culvert End Sectio	each	$1,200.00	2	$2,400			2	$2,400			2	$2,400			2	$2,400			2	$2,400		
Cast-In-Place Retaining Walls	sq. ft.	$55.00	52,500	$2,887,500	19500	$1,072,500	32,500	$1,787,500			27,000	$1,485,000					1,800	$99,000			1,800	$99,000
SUBTOTAL STRUCTURAL COSTS:				**$3,979,360**		**$1,647,320**		**$2,879,360**				**$2,720,860**				**$89,900**		**$99,000**		**$89,900**		**$99,000**
NOISE ABATEMENT COSTS																						
Noise Wall (Wood Planking)	sq. ft.	$7.50																				
Noise Wall Concrete Posts (12" x 18")	lin. ft.	$20.00																				
SUBTOTAL NOISE ABATEMENT COSTS:																						
SIGNING AND STRIPING																						
Roadway Type "C" Signs (Urban)	mile	$10,000.00	1.85	$18,500	1.45	$14,500	1.85	$18,500	1.45	$14,500	1.85	$18,500	1.45	$14,500	1.55	$15,500	1.20	$12,000	1.55	$15,500	1.20	$12,000
Striping - Epoxy	lin. ft.	$0.25	56,000	$14,000	27,750	$6,938	56,000	$14,000	27,750	$6,938	56,000	$14,000	27,750	$6,938	34,000	$8,500	24,000	$6,000	34,000	$8,500	24,000	$6,000
Pavement Message Arrows (Poly)	each	$300.00	42	$12,600	16	$4,800	42	$12,600	16	$4,800	42	$12,600	16	$4,800	30	$9,000	18	$5,400	30	$9,000	18	$5,400
Roadway signing (Type "A", Overhead)	each	$15,000.00	2	$30,000	5	$75,000	2	$30,000	5	$75,000	2	$30,000	5	$75,000								
SUBTOTAL SIGNING COSTS:				**$75,100**		**$101,238**		**$75,100**		**$101,238**		**$75,100**		**$101,238**		**$33,000**		**$23,400**		**$33,000**		**$23,400**
STAGING AND TEMPORARY CONSTRUCTION																						
Temporary Bituminous Pavement	sq. yd.	$10.00	2,500	$25,000			2,000	$20,000			1,500	$15,000			1,000	$10,000			1,000	$10,000		
Temporary Signals	each	$75,000.00																				
Portable Concrete Barrier	lin. ft.	$15.00													500	$7,500			500	$7,500		
Remove Temporary Bit. Pavement	sq. yd.	$3.00	2,500	$7,500			2,000	$6,000			1,500	$4,500			1,000	$3,000			1,000	$3,000		
Traffic Control	lump sum	$75,000.00	0.60	$45,000	0.40	$30,000	0.60	$45,000	0.40	$30,000	0.60	$45,000	0.40	$30,000	0.60	$45,000	0.40	$30,000	0.60	$45,000	0.40	$30,000
SUBTOTAL STAGING COSTS:				**$77,500**		**$30,000**		**$71,000**		**$30,000**		**$64,500**		**$30,000**		**$65,500**		**$30,000**		**$65,500**		**$30,000**
SUBTOTAL CONSTRUCTION COSTS:				**$7,833,268.00**		**$4,402,770.00**		**$6,362,268.00**		**$2,401,450.00**		**$6,152,268.00**		**$2,395,450.00**		**$3,189,250.00**		**$2,150,666.00**		**$3,189,250.00**		**$1,885,031.00**
MISCELLANEOUS COSTS																						
Mobilization	4%			$313,331		$176,111		$254,491		$96,058		$246,091		$95,818		$127,570		$86,027		$127,570		$75,401
Miscellaneous Removals	2%			$156,665		$88,055		$127,245		$48,029		$123,045		$47,909		$63,785		$43,013		$63,785		$37,701
Erosion Control and Turf Establishment	3%			$234,998		$132,083		$190,868		$72,044		$184,568		$71,864		$95,678		$64,520		$95,678		$56,551
SUBTOTAL MISCELLANEOUS COSTS:				**$704,994**		**$396,249**		**$572,604**		**$216,131**		**$553,704**		**$215,591**		**$287,033**		**$193,560**		**$287,033**		**$169,653**
AESTHETICS																						
Retaining Walls	1%			$28,875		$10,725		$17,875				$14,850										
Bridges	1%			$9,810		$5,625		$9,810				$11,250										
Noise Walls	1%																					
Roadway Aesthetics	1%			$78,333		$44,028		$63,623		$24,015		$61,523		$23,955		$31,893		$21,507		$31,893		$18,850
SUBTOTAL AESTHETICS COSTS:				**$117,018**		**$60,378**		**$91,308**		**$24,015**		**$87,623**		**$23,955**		**$31,893**		**$21,507**		**$31,893**		**$18,850**
CONTINGENCIES (10% of Constructio	10%			**$783,327**		**$440,277**		**$636,227**		**$240,145**		**$615,227**		**$239,545**		**$318,925**		**$215,067**		**$318,925**		**$188,503**
ESTIMATED ROADWAY CONSTRUCTION COSTS				**$9,438,607**		**$5,299,674**		**$7,662,407**		**$2,881,740**		**$7,408,822**		**$2,874,540**		**$3,827,100**		**$2,580,799**		**$3,827,100**		**$2,262,037**

(1) Assumes 2' subcut, backfill with 2' select granular material, and 9" aggregate base.
(2) Assumes 12" concrete depth.
(3) Assumes 9" concrete depth.
(4) Assumes 7" bituminous depth.

Appendix E
February 24, 2005 Open House Comments

Wisconsin Department of Transportation

PUBLIC
INFORMATION MEETING/HEARING TESTIMONY

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

FROM:

Name: Dave Clemants
Address: 1601 California Street
La Crosse WI 54603
Representing: Wonder Work Management

TO: District Transportation Director

RJS

We need the Southeast ramp to be kept as shown. It is part of both plans which is good.

I guess I think I like the at grade option (4A) but this is not a strong opinion. Either option works, I just like the idea of 4A because the stop lights will help slow down traffic. I also think 4A offers a nicer looking final product.

Are additional pages included? ☐ Yes ☒ No

PUBLIC INFORMATION MEETING/HEARING TESTIMONY

Wisconsin Department of Transportation
DT1534 1298 (Replaces EO679) Ch. 84 Wis. Stats.

FROM:

TO:

Name: Mark Olson
Address: 927 N Hastings Way
Eau Claire
Representing: Mark's Auto Sales

Transportation District 6
RJS

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

I would like to see some Variation of Plan Alternate 4-A. To block off Symore Rd would adversly effect my Buisness.

Are additional pages included? ☐ Yes ☒ No

PUBLIC INFORMATION MEETING/HEARING TESTIMONY

Wisconsin Department of Transportation
DT1534 12/99 (Replaces ED679) Ch 84 Wis. Stats

FROM:

Name: TIM ABRAHAM
Address: 857 STARR AVE
Representing:

TO:

Transportation District 6
RJS

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

I like the At grade, Light-controlled 4A and for the Seymour crossing, either option makes sense. I do like the opportunity to come from Starr onto Seymour and go North with a stop light. But the other option (Flyg) is okay, too-

Good luck!

(The last thing we need is more bridges that cause more repair and future costs. Forget The Bridge-

Are additional pages included? ☐ Yes ☐ No

PUBLIC INFORMATION MEETING/HEARING TESTIMONY

Wisconsin Department of Transportation
DT1534 1298 (Replaces ED979) Ch. 84 Wis. Stats.

FROM: TO:

Name: Dale Fichter
Address: 2516 Seymour RD
828-3600
Representing: Top Notch Roofing Also

Transportation District 6
RJS

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

I Believe that A Lighted Intersection at Seymour RD. Would Be To the Best of all People Whether you Live Near, operate A Business Near, or are Just Passing Through. I Feel That Plan 9-A would Do this And Solve Problems with the Exceptions Of Frontage RD to South put A Larger Hook on IT To move IT Back Away From Highway to a Safe Distance

I'm Not in Favor For No Access to 53 or all spread out Access That cost is of A greater Value yet!

Are additional pages included? ☐ Yes ☒ No

PUBLIC INFORMATION MEETING/HEARING TESTIMONY

Wisconsin Department of Transportation
DT1534 1298 (Replaces ED672) Ch. 84 Wis. Stats.

FROM:

Name
Jeff Stumm
Address
2217 Seymour Rd.
Eau Claire, WI 54703
Representing
Myself

TO:

Transportation District 6
RJS

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

I like the Alt. 4A plan because where I live, I can access 53 to the North immediately without driving around. But at the same time I will possibly have an increase in traffic going by my house.

I think that the Alt. 2B plan is good in that it **may** decrease traffic by my house but it also can cost a lot more. Plus I still have to ZIG ZAG around to go NORTH on 53.

So again I like the Alt. 4A PLAN the best.

Thank you!

Jeff Stumm

Are additional pages included? ☐ Yes ☒ No

PUBLIC INFORMATION MEETING/HEARING TESTIMONY

Wisconsin Department of Transportation
DT1534 1298 (Replaces ED878) Ch. 84 Wis. Stats.

1 of

FROM:

TO: Any questions please call me 839-8666 cell 828-6571

Name: Terry BIDDLE
Address: 2425 Seymour Rd
Eau Claire WI 54703
Representing: Awards Plus (Trophy Biz)

Transportation District 6
RJS

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

In view of the fact that my business is located at Seymour Road & 53 and that I have 4 rentals within my building I prefer to have an intersection stay at 53 & Seymour. I would also very much like to have stop lites at Seymour road. In addition, because of our volume of traffic into our parking lot (4000 ~~pass~~ vehicles per day, I would like to see the turning ~~for~~ lane going north bound on 53 before Seymour, widened to allow east bound turning traffic going to my business and on the Pizza place ~~and~~ a safe opportunity to complete the turn to go "south-bound on the service road.. at present vehicles going north which want to go to the Pizza place cannot make a safe reverse turn. I and other

Are additional pages included? ☐ Yes ☐ No

PUBLIC INFORMATION MEETING/HEARING TESTIMONY

Wisconsin Department of Transportation
DT1534 1298 (Replaces ED879) Ch. 84 Wis. Stats.

2 of

FROM:

TO:

Name
Address
Representing

Transportation District 6
RJS

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

is stopped at the stop sign. ~~go~~
Several years ago, I had ~~be~~ spoke to the state of Wisconsin and they had actually come to my property and we agreed that with the property they own, the own the entire grass (snow now) area along the entire 3rd of the west side of my building. (To restate, the state has ~~the~~ purchased the entire area in front of Arrows & More such that the could widen the service road location & move it next to the edge of my parking lot (west side) so people going north bound on 53, which won't ~~be~~ to go to Pizza Del Re can make the turn safely. I understood that ~~a~~ retaining wall would be put up on the west side of my parking lot. ~~(~~ next to the service road)

Are additional pages included? ☐ **Yes** ☐ **No**

PUBLIC INFORMATION MEETING/HEARING TESTIMONY

Wisconsin Department of Transportation
DT1534 1298 (Replaces ED879) Ch. 84 Wis. Stats

3 of

FROM:

TO:

Name

Address

Representing

Transportation District 6
RJS

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

~~As far as th~~ E

also, Fed Ex has a constant flow of semis & straight trucks going to and from their location on Seymour Rd. It would be logical for them to cross 53 at Seymour and continue both directions safely & quickly ... Stop lites would do this as long as Seymour Road would go ~~across~~ straight across 53 (as well as Nova).

I have 3-5 semis unloading items per day. It sure is nice to tell them "just turn at Seymour & 53".

~~Bottom line is to put my business at~~ ~~Need to view~~

Bottom line is that to remove the intersection from the front of my company would greatly reduce the ability to allow

Are additional pages included? ☐ **Yes** ☐ **No**

PUBLIC INFORMATION MEETING/HEARING TESTIMONY

Wisconsin Department of Transportation
DT1534 1206 (Replaces ED879) Ch. 84 Wis. Stats.

4

FROM:

TO:

Name
Address
Representing

Transportation District 6
RJS

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

@ not only give directions to our customers but to actually "get them there."

In addition to owning & Moving, which employees 18 people I have 4 other businesses which rent from me. (1) All A's Driving School - 40 students 2-3 times per day! (2). Northwoods Furniture 10-20 customers per day (3) SBC Ameritech 5-10 people per day. (4) Blow Out Sport Cards 10-30 people per day.

Please keep the intersection just widen it with the property the state owns anyway, and put in stop lites

I am in favor as well as my ~~tenants~~ renters renters of 4A, which was the original plan several years ago.

One last thing we please don't put another bridge on 53 by Shaleledge.

Are additional pages included? ☐ Yes ☐ No

PUBLIC INFORMATION MEETING/HEARING TESTIMONY

Wisconsin Department of Transportation
DT1634 1298 (Replaces ED879) Ch. 84 Wis. Stats.

FROM:

TO:

Name: Brad Henderson
Address: 1433 Lyndale Av.
Eau Claire, WI 54701
Representing:

Transportation District 6
RJS

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

The issue for me is, How Do We Move Bicycles & Pedestrians Through The Intersection on Birch St?

The two residential neighborhoods can be better connected and traffic volumes reduced if accomodations for bicycles is included in the design. Without adequate design for bicycles and pedestrians, the Hastings Way right-of-way will continue to serve as a "moat" severing the neighborhoods and all but requiring residents to use a motor vehicle for all movements through the intersection - even if the trip is a couple miles or less.

The other reason to accomodate bicycles along Birch St. is that Hwy 12 is identified as

Are additional pages included? ☒ Yes ☐ No

PUBLIC INFORMATION MEETING/HEARING TESTIMONY

Wisconsin Department of Transportation
DT1534 1298 (Replaces ED879) Ch. 84 Wis. Stats

FROM:

Name: Brad Henderson
Address: (continued)
Representing:

TO:

Transportation District 6
RJS

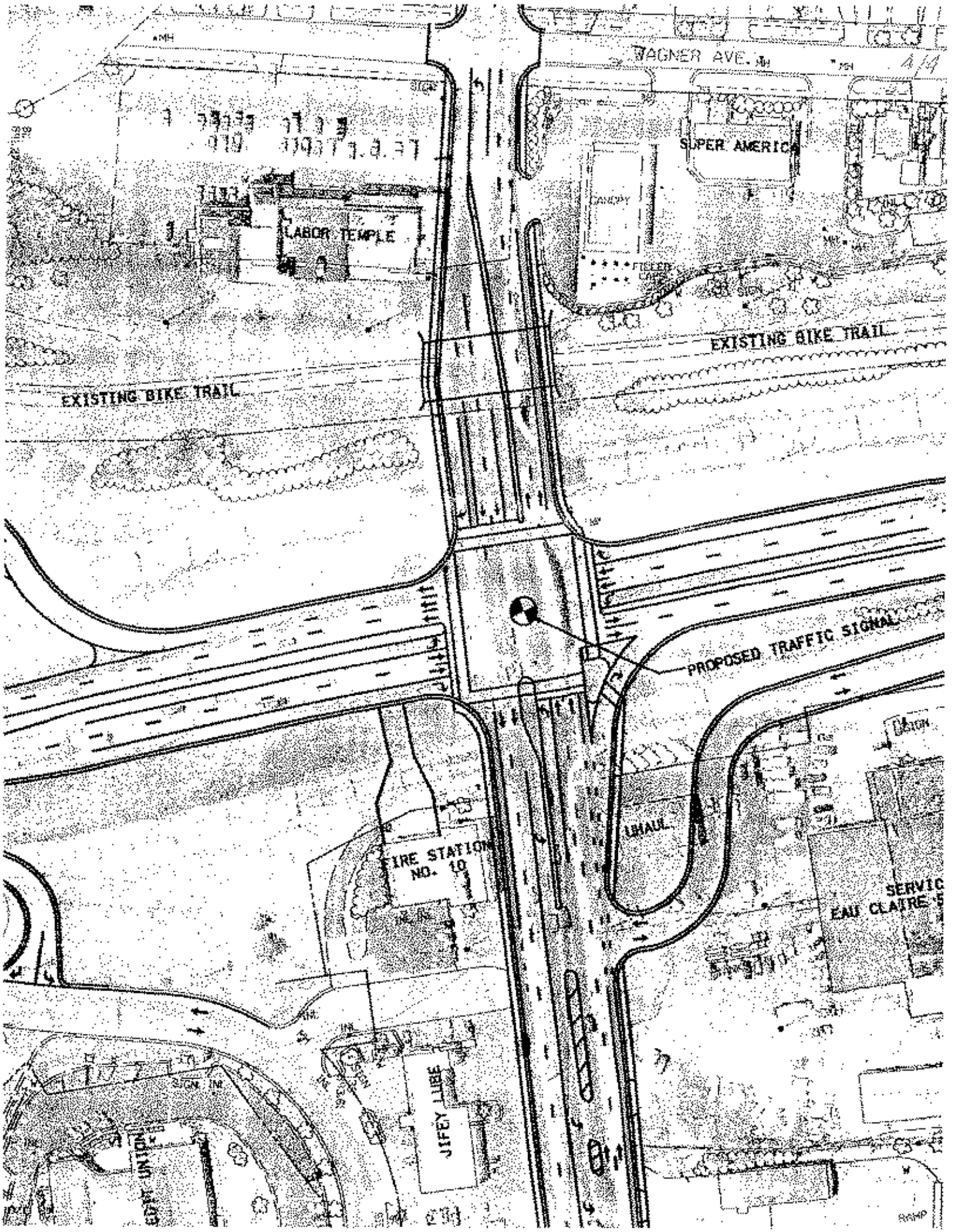
Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

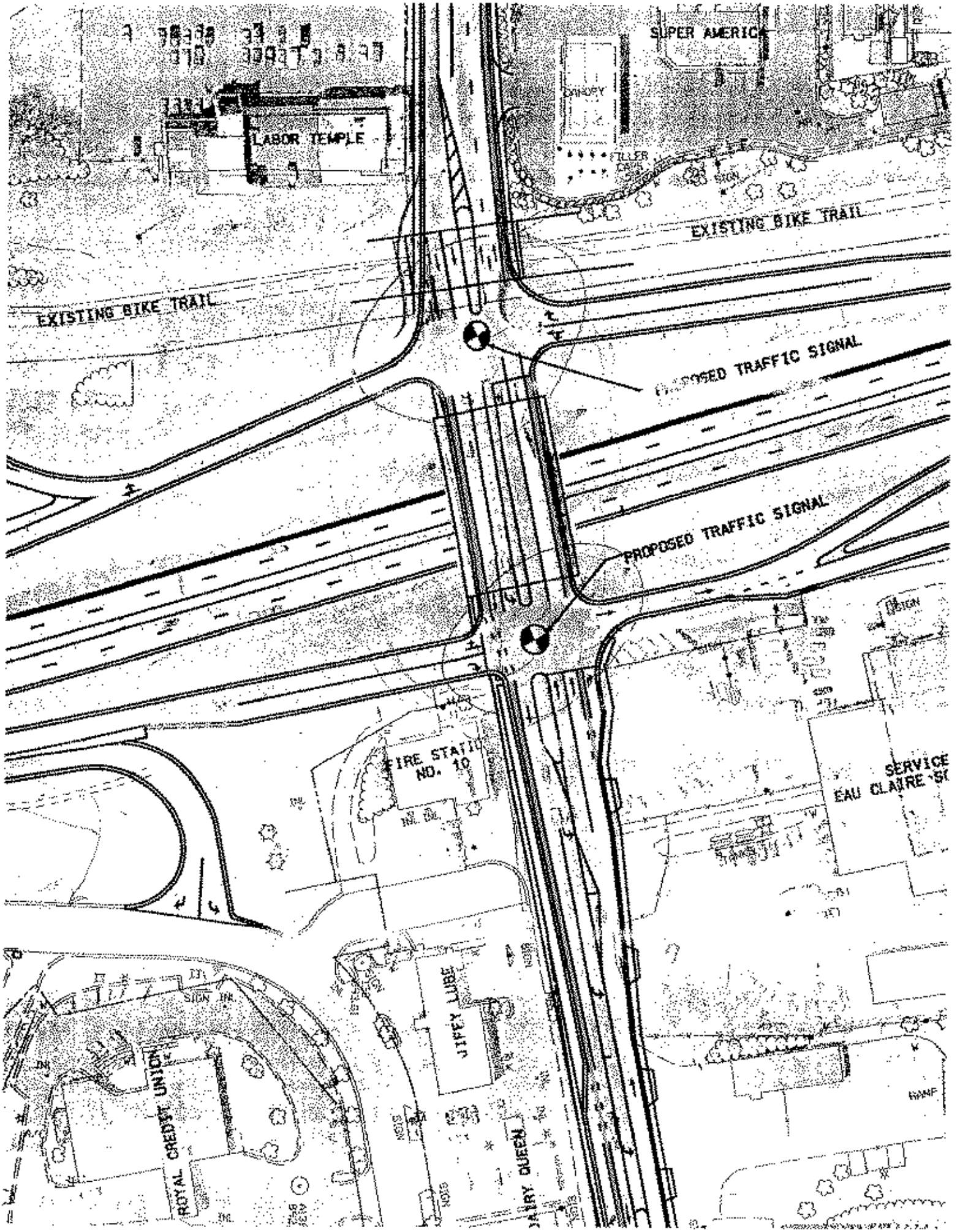
a county bicycle friendly route. Many City of Eau Claire residents use Hwy Q as a bicycle way for training rides. Providing bicycle access through the intersection will allow these cyclists to continue to access Hwy Q. without interfering with motor vehicles.

Whichever design is chosen, Bicycle lanes should be included to safely move bicyclists through the intersection. The attached drawings give proposed locations for bike lanes which will safely move bicyclists across Hastings Way.

To continue to encourage alternative transportation methods thereby reducing the number of vehicles utilizing the intersection, I urge you to include accomodations for bicyclists in the design.

Are additional pages included? ☐ Yes ☐ No


WAGNER AVE.
SUPER AMERICA
LABOR TEMPLE
EXISTING BIKE TRAIL
EXISTING BIKE TRAIL
PROPOSED TRAFFIC SIGNAL
FIRE STATION NO. 10
JIFFY LUBE


LABOR TEMPLE
SUPER AMERICA
CANOPY
EXISTING BIKE TRAIL
EXISTING BIKE TRAIL
PROPOSED TRAFFIC SIGNAL
PROPOSED TRAFFIC SIGNAL
FIRE STATION NO. 10
SERVICE
EAU CLAIRE ST
ROYAL CREDIT UNION
JIFFY LUBE
DAIRY QUEEN

N/E

Wisconsin Department of Transportation

PUBLIC
INFORMATION MEETING/HEARING TESTIMONY

Project 1190-05-03
USH 53 (Hastings Way)
Birch St. & Seymour Rd. Intersections
City of Eau Claire

FROM:

Name: Lydia's - Scott Barr
Address: 1053 N. Hastings Way
Eau Claire, WI 54703
Representing: Lydia's

TO: District Transportation Director

RJS

My concerns are the Seymour Road intersection (Birch street is for the businesses located in that area to decide). I feel it is very important that you keep easy customer access to those of us that have built business in this area. Visibility from Hwy 53 is of no value to our types of business if customers do not have easy access. We are retail.

1. **Alternate 4A**: This would be **my first choice**. This offers easy access to and from our business area and is very close to what we have now.
2. Alternate 2D: This would work, but would cause heavy traffic by our building and drive/loading dock area (we are on the corner of Trindal). This would still provide easy access from N. 53, but no access from S 53.
3. You did show an alternate option that did not provide any easy access to our area. There was no easy way for customers to find us on that plan. That plan would force us to close at this location.

**We need easy customer access to survive!

Thank you,
Scott Barr
Owner: Lydia's
1053 N. Hastings Way
715-552-0400

Lydia's
LIGHTING, FURNITURE & GIFT GALLERY
SCOTT BARR
OWNER
1053 N HASTINGS WAY
EAU CLAIRE, WISCONSIN 54703
PHONE 715.552.0400 FAX 715.552.0401

ges included? ☐ Yes ☒ No

March 1, 2005

Rick Shermo
Project Supervisor
WisDOT District 6
718 W. Clairemont Avenue
Eau Claire, Wisconsin 54701

Dear Mr. Shermo,

I would like to introduce myself, Dr. Max Menacher, Jr. I am a dentist with a business located at 1025 N. Hastings Way, Eau Claire. I am sorry to have missed your open house regarding Hastings Way Business Highway 53 at Birch and Seymour Road. Unfortunately, I was called out of town on commitments.

Just a little background, I am a business that has four full time and three part-time employees and have been located at our present location for four years. I made a decision to locate my Practice on the north side of town, having moved from Regis Court after seeing an opportunity in a business strip with the potential plans for a stop light at the Seymour Road and Highway 53 intersection. These were put on hold and I am glad to see the project is back on track. After making a considerable lease hold infrastructure investment at 1025 N. Hastings Way, and having endured all the known problems with the intersection at Seymour Road, I feel strongly that Plan 4A would be not only a good plan for the surrounding residential community, but the business community as well. The potential for increased access and visibility will accentuate the present businesses and possibly attract others. The present situation and Plan 2D would not make access easier to the business community. I've had the experience of moving a business from a good accessed road to one with a poor intersection. It has taken much work over the last four years to recover the losses incurred by my patients "fears" of the Seymour Road/Hastings Way intersection, especially my senior citizen population. Plan 4A will slow things down and make easier access! I still have concerns regarding the lack of any descriptions of what will be done about the extensive drainage problem we experience running north down Hastings Way from Seymour Road and Ron's Restaurant parking lot during the rains and spring thawing.

I look forward to hearing what plan is in store for the drainage distribution and exactly what the final plan will be for Hastings Way in front of 1025. Thank you.

Sincerely,

Max Menacher, Jr., D.D.S.

Max Menacher Jr., D.D.S.
1025 N. Hastings Way, Suite 3
Eau Claire, Wisconsin 54703
715.832.8287